POSTER SESSION

1112 Coronary Syndromes in the Elderly

Monday, March 31, 2003, Noon-2:00 p.m.
McCormick Place, Hall A
Presentation Hour: 1:00 p.m.-2:00 p.m.

1112-82 The Role of Myocardial Revascularization Surgery and Percutaneous Coronary Intervention in the Long-Term Follow-Up of Elderly Patients With Myocardial Infarction

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Background: Little is known, especially in the elderly, about the role of surgical myocardial revascularization and percutaneous coronary intervention (invasive procedures - IP) in the long-term follow-up of pts with acute myocardial infarction (AMI), aim of this study.
Methods: we analyzed 481 pts with AMI included prospectively and consecutively in a databank and followed for up to 4 years (mean survival time 3.15 y). During the in-hospital phase, 309 pts were submitted to IP (64.2%), and 151 (31.4%) were older than 69 years. Pearson Chi-square, Fisher exact test and Two-sample t-test were utilized for the in-hospital analysis; Kaplan-Meier estimator, log-rank test and Cox proportional hazards regression were utilized in the long-term follow-up analysis.
Results: (a) In-hospital analysis: for the elderly population, the mortality rate was 21.8%; the mortality rates for the subgroups submitted to IP (n=85) or treated conservatively were, respectively, 18.8% and 24.2% (OR=0.78, p=0.53); for pts younger than 70 y, the mortality rate was 5.5%; the mortality rates for the invasive (n=224) or conservative subgroups were 6.2% and 4.7%, respectively (OR=1.35, p=0.58). (b) Long-term follow-up analysis: the unadjusted survival rates for invasive and conservative groups in the whole population were, respectively, 83.1% ± 2.3 and 70.6% ± 3.8 (p=0.007); in the subgroup of pts older than 69 y the survival rates were 74.8% ± 4.8 and 49.7% ± 7, respectively (p=0.035); in the subgroup of pts younger than 70 y, the survival rates were 86.3% ± 2.5 and 83.1% ± 3.9 (p=0.7). Adjusted survival rates: 80 ± 1.7 and 46.8± 3.2 for the elderly population (p=0.035); 87.2 ± 1.3 and 82.5 ± 2.0 for younger pts (p=0.7). Survivall rates excluding 63 pts treated with primary angioplasty: in the elderly group, 78.2 ± 5.4 and 49.7 ± 7.0 (p=0.011); in the younger group 86.8 ± 2.8 and 83.1 ± 3.9 (p=0.56).
Conclusion: in the long-term follow-up post-AMI, the invasive strategy was more efficacious in elderly patients.

1112-83 The Very Elderly (Over 80 Years) With Acute Ischemic Syndromes Have Distinct Characteristics and Outcomes From Over 70 Years

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Background: Outcomes in elderly pts with acute ischemic syndromes (AIS) need independent analysis in order to define optimal treatment strategies. Even within this pt. group age may remain an important outcome predictor. We compared characteristics and outcomes in pts 70-79 and ≥80 yrs with AIS.
Methods: We studied 198 consecutive octogenarians (84.1±4.0 yr) and 251 consecutive septuagenarians (74.3±2.7 yr) with AIS. Pts were selected for coronary angiography and revascularization by clinical criteria and physician preference. Rehospitalization and symptomatic status were assessed at 14±7 mths and survival at 24+3.5 mths.
Results: Adverse baseline characteristics were more prevalent in pts 80+ yrs. Less had angio but greater proportion of these had revascularization (Table).

Prevalence of Baseline Characteristics in Patients 70+ and 80+ Years

	CHF (%)	AMI (%)	Renal failure(%) (creat≥1.5)	Coronary angio (%)	Revascularization	
					% all	% angio
70+ yrs	48 (19.4)	23 (9.7)	30 (12.3)	110 (43.8)	61 (24.3)	61 (55.5)
80+ yrs	66 (33.3)	63 (35.0)	41 (21.6)	58 (29.3)	45 (22.7)	45 (77.6)
p	.001	.0001	.01	.002	ns	.005

Mortality (65, 32.8% vs 40, 15.9%; p=.0001) and rehospitalization (106, 54% vs 112, 45%; p=.06) were greater in pts 80+ yrs but survivors had greater symptomatic improvement at follow-up (84, 60.3% vs 96, 45.9%; p=.007).
Conclusions: Major differences exist in baseline characteristics and clinical outcomes in consecutive pts 70+ and 80+ yrs hospitalized for acute ischemic syndromes 2. Mortality was double and repeat hospitalization more frequent in pts 80+ but late symptomatic benefit was greater 3. Coronary angiography was performed less frequently in pts 80+ but more often lead to revascularization 4. Differences between 70+ and 80+ cohorts should be considered when analyzing outcomes of clinical trials in these age groups.

1112-84 Sex Differences in Elderly Patients--Use of Coronary Revascularization After Acute Myocardial Infarction: A Tale of Two Therapies

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Background: Prior studies have reported conflicting findings concerning sex differences in coronary revascularization use after cardiac catheterization among patients hospitalized with acute myocardial infarction (MI). The extent to which sex differences in coronary revascularization use vary by type of revascularization therapy is unclear.
Methods: We evaluated patients from the Cooperative Cardiovascular Project, a set of Medicare beneficiaries hospitalized for MI between 1994-1996, to determine if women were less likely than men to undergo coronary revascularization post-MI. Patients 65 years of age or older not transferred in to the hospital who had undergone cardiac catheterization post-MI (n=66,830) were evaluated for the use of percutaneous coronary interventions (PCI) or coronary artery bypass surgery (CABG) within 60 days of MI. Multivariable logistic regression analyses were used to derive risk-standardized rates for the use of any coronary revascularization, revascularization by CABG, and revascularization by PCI after adjusting for patient sociodemographic and clinical factors, physician characteristics, and hospital type.
Results: Women had lower crude rates of overall coronary revascularization than men (65.2% vs. 68.7%, p<0.001). Sex differences in revascularization use, however, varied by type of revascularization therapy. Women had lower rates of CABG use than men (26.6% vs. 33.2%, p<0.001), but higher rates of PCI use than men (41.4% vs. 38.5%, p<0.001). Multivariable adjustment reduced the sex difference in overall coronary revascularization use from 3.5% to 2.1% (66.0% women vs. 68.1% men, p<0.001). Women had lower risk-standardized rates of CABG use (27.3% vs. 33.3%, p<0.001), but higher risk-standardized rates of PCI use (42.0% vs. 38.2%, p<0.001) than men.
Conclusion: Sex differences in coronary revascularization use among elderly patients post-MI vary by revascularization strategy with women less likely to undergo CABG, but more likely to undergo PCI than men.

1112-85 The Effect of Age on Early Death and Stroke Rates in Patients With Heart Failure After Acute Myocardial Infarction

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Background: Most trials of patients with heart failure following myocardial infarction have not enrolled a representative population, with many elderly patients being excluded.
Methods: In the VALsartan In Acute myocardial iNfarcTion (VALIANT) trial, in which patients had heart failure and/or a left ventricular ejection fraction of <40%, 3,189 patients (21.5%) were aged ≥75 years. We evaluated the effect of demographics and outcomes at 30 days in patients aged <75 and ≥75 years.
Results: Compared with younger patients, elderly patients were more likely to have high-risk demographics. However, their ejection fractions were similar. Older patients were less frequently treated with aspirin, β-blockers, or reperfusion therapy. On multivariable analysis, including all baseline variables, age was an independent predictor of 30-day mortality, with each 10-year increase in age being associated with a 50% increase in 30-day mortality (hazard ratio 1.47, 1.35 – 1.60).
Conclusion: Despite high β-blocker and ACE inhibitor and/or angiotensin receptor blockade usage in all patients (the drugs being tested in VALIANT), outcomes remain less than ideal in very elderly patients. More effective therapies are required to improve survival and decrease the incidence of stroke in this important and increasing cohort.

	Age <75 n = 11,615	Age ≥75 n = 3,189	P value
Female sex	26.7%	47.3%	<0.0001
Body mass index	28.3	26.6	<0.0001
Killip class III	16.3%	21.4%	<0.0001
Killip class IV	5.8%	8.2%	<0.0001
Renal insufficiency	3.6%	7.0%	<0.0001
Diabetes	22.9%	23.7%	0.3573
Hypertension	53.3%	61.6%	<0.0001
Prior MI	26.5%	33.1%	<0.0001
Prior CVA	5.3%	9.1%	<0.0001
Ejection fraction	34.8%	34.5%	0.1556
Heart rate, beats/min	76.4	75.7	0.0198
Systolic BP, mmHg	121.8	125.8	<0.0001
Aspirin	89.9%	85.8%	<0.0001
Beta blockers	72.2%	63.0%	<0.0001
Thrombolysis	37.6%	25.4%	<0.0001
Primary angioplasty	16.5%	9.6%	<0.0001
Death	3.2%	7.2%	<0.0001
Stroke	0.7%	1.2%	0.008
Death or stroke	3.7%	8.0%	<0.0001